Health Science Education
Medical Diagnostics
Course Code #5511

1 Credit

School Year_____

Term:_____**Fall**_____**Spring**

Rate each student on the following

3 – Mastered (Can work independently with no supervision)

2 – Require supervision (Can perform with limited supervision)

1 – Not mastered (Requires instructions and close supervision)

N – No exposure (No experience or knowledge in this area)

Student:_____Grade_____

Teacher:_____School_____

Number of Competencies in Course: **51**
Number of Competencies Mastered:
Percent of Competencies Mastered:

Standard 1.0 Students will interpret an imaging diagnostic request, select appropriate equipment, and identify basic anatomy on the resulting images.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
1.1	Evaluate the request for services, reporting inconsistencies in the patient's history.	3	2	1	N		
1.2	Match resources/image system with diagnostic needs.	3	2	1	N		
1.3	Demonstrate the role of the professional in each stage of the imaging chain.	3	2	1	N		
1.4	Apply patient and personnel radiation protection where appropriate.	3	2	1	N		
1.5	Prepare the imaging unit for an imaging procedure.	3	2	1	N		
1.6	Evaluate the resulting diagnostic image for quality.	3	2	1	N		
1.7	Identify basic anatomy on medical images, static and fluoroscopic videos.	3	2	1	N		

Standard 2.0 Students will know and apply various communication methods to give, obtain and transmit information.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
2.1	Determine client's ability to understand.	3	2	1	N		
2.2	Respond to client's concerns and fears.	3	2	1	N		
2.3	Use language appropriate to the situation, reassuring and informing the client of what to expect.	3	2	1	N		
2.4	Use facility guidelines for giving health care information.	3	2	1	N		
2.5	Respect clients' cultural differences.	3	2	1	N		
2.6	Transmit diagnosis electronically or manually to client records or referring professionals.	3	2	1	N		
2.7	Document and report information about changes in conditions that might introduce risks to clients or staff.	3	2	1	N		

Standard 3.0 Students will distinguish between sinus, atria and ventricular rhythms and assess cardiac output and tissue perfusion.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
3.1	Sketch gross heart anatomy and the related cardiac conduction pathways.	3	2	1	N		
3.2	Analyze four lead cardiac rhythm strips and differentiate between critical and non-critical sinus, atria and ventricular dysrhythms.	3	2	1	N		
3.3	Assess cardiac output and tissue perfusion using a pulse oximeter and/or capillary refill.	3	2	1	N		

Standard 4.0 The student will perform electrocardiogram and an electromyogram and evaluate the results.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
4.1	Sketch lead placements as they relate to topographical anatomy.	3	2	1	N		
4.2	Prepare client mentally and physically for the procedures.	3	2	1	N		
4.3	Perform the procedures using proper equipment and technique.	3	2	1	N		
4.4	Analyze and report results as appropriate.	3	2	1	N		
4.5	Restore equipment to original state, i.e. calibration, storage.	3	2	1	N		

Standard 5.0 The student will collect, label and process artificial samples of body fluids and tissues for laboratory assessment.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
5.1	Demonstrate the steps in obtaining and labeling venous and capillary blood samples for laboratory, diagnostics or on laboratory models.	3	2	1	N		
5.2	Demonstrate specimen collection and processing for over the counter screening test (example: blood glucose or strep test).	3	2	1	N		
5.3	Collect, measure and test artificial samples of urine using reagent strips and gross analysis.	3	2	1	N		

Standard 6.0 Students will interpret an optical prescription, select the equipment, and initiate the procedure for obtaining corrective lenses.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
6.1	Differentiate between normal and abnormal anatomy of the eye.	3	2	1	N		
6.2	Mathematically equate ophthalmology and optometry prescriptions and calculate the amount of blank surface required.	3	2	1	N		
6.3	Formulate an appropriate eye wear product and complete the order form for a client according to facility guidelines.	3	2	1	N		
6.4	Safely use a lensometer to obtain a prescription for validation and quality control.	3	2	1	N		
6.5	Assess post prescription vision and give instructions for care of eyewear product.	3	2	1	N		

Standard 7.0 The student will be aware of the existing and potential hazards to clients, co-workers, and self; of preventing injury or illness through safe work practices, and by following health and safety policies and procedures.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
7.1	Use Standard Precautions and OSHA Standards to control the spread of infection.	3	2	1	N		
7.2	Prevent fire and electrical hazard.	3	2	1	N		
7.3	Manage materials safely, following emergency procedures, protocols and procedures to reduce waste and contain costs.	3	2	1	N		
7.4	Use equipment safely.	3	2	1	N		
7.5	Analyze equipment performance to standards by performing quality control tests.	3	2	1	N		

Standard 8.0 The student will maintain client comfort, monitor and assess client status and report results to the treatment team while safely performing diagnostic studies.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
8.1	Measure and report client vital signs or other indications of health status.	3	2	1	N		
8.2	Record client health status according to facility protocol.	3	2	1	N		
8.3	Assist in determining the need for follow-up or alternative care.	3	2	1	N		
8.4	Observe ways to maintain patient airway and IV fluid maintenance during diagnostic procedures.						
8.5	Position client to ensure comfort, using appropriate transport or transfer equipment.						

Standard 9.0 The student will examine the range of diagnostic services and the professionals who provide those services.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
9.1	Compare the role and academic requirements to practice in the diagnostic areas of radiography, nuclear medicine and ultrasonography.	3	2	1	N		
9.2	Compare the diagnostic roles of medical technology, clinical laboratory sciences and subspecialities and settings for employment.	3	2	1	N		
9.3	Compare the educational requirement, certification, and licensures for performing ECG, EKG, and telemetry and vision care professionals.	3	2	1	N		
9.4	Compare the continuing professional development requirements for the various diagnostic professions.	3	2	1	N		
9.5	Operate within medical legal requirements for diagnostic careers.	3	2	1	N		

Standard 10.0 The student will perform classroom laboratory activities and apply knowledge and skills in a health care diagnostic clinical setting.

*One of these columns must be checked

Learning Expectations	Check the appropriate Mastery or Non-Mastery column*	Rating (Circle one)				Mastery	Non-Mastery
10.1	Read, interpret, verbalize and apply policies and procedures appropriate to the health care setting.	3	2	1	N		
10.2	Participate in a health care facility orientation prior to clinical experience.	3	2	1	N		
10.3	Demonstrate the use of pertinent safety precautions and aseptic techniques.	3	2	1	N		
10.4	Utilize proper communication, critical thinking and problem-solving techniques.	3	2	1	N		
10.5	Demonstrate the safe and appropriate use of equipment and supplies.	3	2	1	N		
10.6	Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	3	2	1	N		

Additional Comments_____